UNIVERSITY OF KANSAS HEALTH SYSTEM CASE STUDY

KUHS experienced an additional jump in productivity and efficiency by simplifying orders and encounters matching workflows, and reducing duplicate document queues, with the new features of Extract's automated data extraction software.

extract

DEPLOYING EXTRACT'S VERSION 10.3 PRODUCTIVITY MODULES SIGNIFICANTLY REDUCED THE AMOUNT OF TIME IT TOOK KUHS STAFF TO ENTER LAB RESULTS INTO THE EMR AND INCREASED OVERALL QUALITY OF PATIENT CARE AND DATA ACCURACY.

BACKGROUND:
The University of Kansas Health System began using Extract's 10.1 data extraction software in October, 2015. Although Extract's software was getting lab results into the EMR quickly, it became clear that there was room for optimizing the process of matching external lab results to existing orders and encounters in Epic automatically.

Challenges:

ORDERS MATCHING:
Without the "*Orders Matching*" productivity module in place, KUHS staff would receive a paper lab result by fax and anticipate that the software would efficiently and effectively capture all the data discretely. However, the process of determining which patient record and order number Extract should associate results with was time consuming.

The process involved looking-up the patient in Epic, locating the order number, and manually entering the 12-digit number into Extract's user interface. This process would repeat itself for all 11,000 paper lab results KUHS received annually. The task was mundane and time consuming for staff to complete without errors, and took away from the efficiency gained by the automated data capture software they had deployed.

ENCOUNTERS:
In order to facilitate the routing of the original document to the correct order and encounter in Epic via KUHS's document management system, the encounter number associated with the order is required. Similar to KUHS's manual orders matching workflow above, staff would also need to locate the encounter number and manually enter the number into Extract's user interface. This saved staff from manually scanning and routing the original document, but added time to get the lab results and original documents into the system efficiently.

DUPLICATE DATA:
Generally, external labs will send partial results and resend the results again when they have completed pending status. Sometimes, they provide duplicate results in their entirety accidentally, or send one result per page across many pages, making it difficult to ensure the single order stays together. When this occurs, data entry personnel struggles to manage duplicate documents. Without the Extract Duplicate Document productivity module in place, KUHS data entry personnel would forward duplicates to a separate queue. KUHS personnel would then review each one and determine the next action.

THE UNIVERSITY OF KANSAS HEALTH SYSTEM:
Extract and The University of Kansas Health System worked closely to implement Extract Systems version 10.3 automated clinical extraction software and productivity modules, which allowed KUHS to optimize orders and encounters matching, as well as their duplicate data workflows.

*WE HAVE BEEN **OVERLY IMPRESSED** WITH OUR UPGRADE TO EXTRACT 10.3.*

-Sophy Oung
Organ Transplant Manager

Extract Solution:

ACTION:

Extract understood the pain KUHS staff was facing with orders and encounters matching, as well as duplicate document queues. Extract worked in tandem with staff to deploy new productivity modules as a part of implementing the 10.3 software upgrade. With these new modules in place, Extract's software is able to automatically match the patient information found within incoming faxed lab results with patient records in Epic. In addition, Extract locates related order and encounter information to determine they are also a match.

Today, data entry personnel are able to quickly and easily look at the suggested match within Extract's user interface. With one click of a button the orders are matched to the patient automatically without any manual entry.

The new duplicates handling functionality in version 10.3 allows KUHS to solve their issue of receiving a vast amount of duplicate documents and having results lost in a queue. Extract is able to use any data captured from incoming faxes to identify documents as potential duplicates. KUHS, like most Extract customers, will identify a duplicate based on documents that have the same patient name, date of birth, and collection date. When all of these items match, Extract's software detects the duplicate and alerts the user immediately, while presenting them with easy options to discard or merge documents as appropriate, based on their organization's needs.
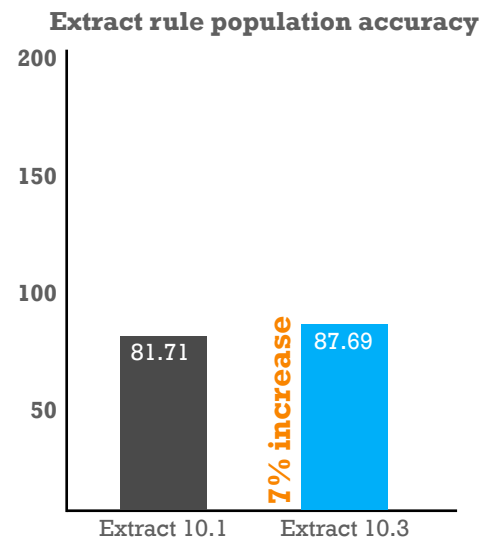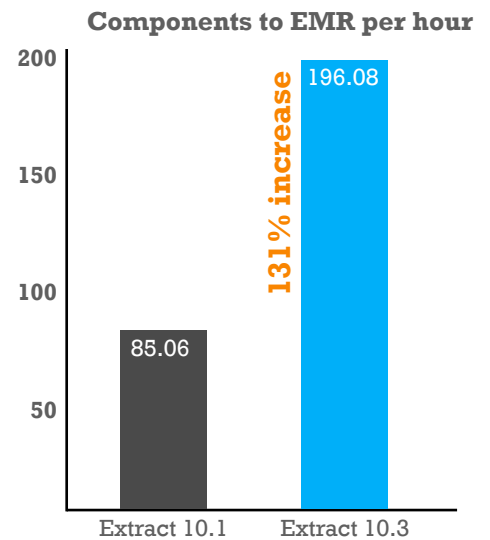
RESULTS:

Since the upgrade to Extract 10.3, KUHS has experienced faster results, their error queue has decreased, and according to Sophy Oung, "*all of their verifiers will tell you they love the duplication upgrade.*" The upgrade has also allowed KUHS to **enter about 200 components into the EMR per hour resulting in a 131% increase compared to version 10.1.**

KUHS was also able to take advantage of Extract's Universal Lab Result ruleset, an architectural change in 10.3 that allows Extract to share accuracy gains and ruleset improvements from one customer to another to maximize accuracy for all. With the deployment of this new ruleset, their accuracy rating improved by almost 6 percentage points to over 87% accuracy, which means that **over 8.7 fields out of every 10 fields captured are 100% correct.**

EXTRACT VERSION 10.1 VS. 10.3 COMPARISON CHART:

Components to EMR per hour

	Extract 10.1	Extract 10.3
Value	85.06	196.08

131% increase

Extract rule population accuracy

	Extract 10.1	Extract 10.3
Value	81.71	87.69

7% increase

Benefits:

For potential and existing customers alike, Extract is constantly developing better tools for extraction, indexing, and redaction. We work with our customers and prospects to understand the challenges they are facing and create automated solutions to help them increase the speed and accuracy of their current document handling and data extraction processes.

> *THE WORD IS SPREADING AT KUHS AND **OTHER DEPARTMENTS ARE INVESTIGATING IMPLEMENTING EXTRACT** TO OPTIMIZE THEIR WORKFLOWS.*

-Sophy Oung
Organ Transplant Manager

If you would like more information about how Extract's software can help your organization, let's setup a 15-minute intro call. Contact **sales@extractsystems.com.**

If you are a current user of the Extract Platform and regularly attend our Bi-Monthly Healthcare Round tables, you have probably noticed that we regularly show new functionality available in our newest releases. We want all our customers to be using our latest and greatest features, so please contact your Professional Services representative to talk through the options. We encourage you to stay up-to-date, be on the cutting edge, embrace the change, and get the most out of your software.

CONTACT YOUR PROFESSIONAL SERVICES REPRESENTATIVE TO DISCUSS UPDATING OPPORTUNITIES THAT MAKE SENSE FOR YOUR ORGANIZATION TODAY.